

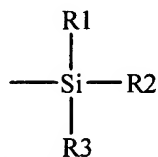
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

CLAIM LISTING:

1. (Currently Amended) A proton conduction material comprising:

a polymer material which has a molecular structure having a main chain and a side chain grafted on the main chain and at least partially including, at the ends of the grafted chains, ~~an end~~ structure expressed by a formula shown below, and which has a strong acid functional group in the molecular structure,



the formula being

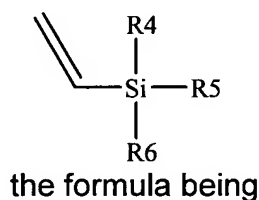
where R1, R2 and R3 are independent of one another and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical.

2. (Original) The proton conduction material according to claim 1, wherein

R1, R2 and R3 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.

3. (Original) The proton conduction material according to claim 1, wherein the strong acid functional group is a sulfonic acid functional group.

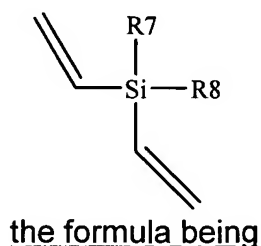
4. (Currently Amended) A proton conduction material comprising:
~~a polymer of a mixture~~ a polymer derived/prepared from a mixture, which contains a monomer having a vinyl radical and a monomer expressed by a formula shown below and whose molecular structure has a strong acid functional group,



where R4, R5 and R6 are independent of one another and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical; and

further comprising:

a monomer expressed by a formula shown below.



where R7 and R8 are independent of each other and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical.

5. (Original) The proton conduction material according to claim 4, wherein R4, R5 and R6 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.

6. (Original) The proton conduction material according to claim 4, wherein the strong acid functional group is a sulfonic acid functional group.

7. (Cancelled).

8. (Currently Amended) The proton conduction material according to claim [[7]]4, wherein

R7 and R8 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.

9. (Original) The proton conduction material according to claim 4, wherein the monomer having the vinyl radical contains styrene, and the strong acid functional group is introduced into a phenyl radical originating from the styrene.

10. (Original) The proton conduction material according to claim 4, wherein

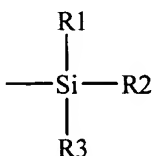
the monomer is vinyl triethylsilane, vinyl tris (trimethylsiloxy) silane, and/or vinyl-t-butyl dimethylsilane.

11. (Currently Amended) A method of manufacturing a proton conduction material, comprising the steps of:

grafting a side chain on a main chain such that a molecular structure at least partially including, at the end of the grafted chain, an end structure expressed by a formula shown below is obtained,

introducing a strong acid functional group into the molecular structure,

the formula being



where R1, R2 and R3 are independent of one another and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical.

12. (Original) The method according to claim 11, wherein

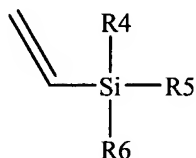
R1, R2 and R3 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.

13. (Original) The method according to claim 11, wherein

the strong acid functional group is a sulfonic acid functional group.

14. (Currently Amended) A method of manufacturing a proton conduction material, comprising the step of:

introducing a strong acid functional group into a molecular structure
containing a monomer having a vinyl radical and a monomer expressed by a formula



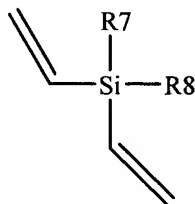
shown below,

the formula being

where R4, R5 and R6 are independent of one another and represent a
hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy
radical; and

further comprising the step of:

introducing a monomer expressed by a formula shown below,



the formula being

where R7 and R8 are independent of each other and represent a
hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy
radical.

15. (Original) The method according to claim 14, wherein

R4, R5 and R6 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a 1-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.

16. (Original) The method according to claim 14, wherein
the strong acid functional group is a sulfonic acid functional group.
17. (Cancelled).
18. (Currently Amended) The method according to claim ~~[[17]]~~14, wherein
R7 and R8 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.
19. (Original) The method according to claim 14, wherein
the monomer having the vinyl radical contains styrene, and
the strong acid functional group is introduced into a phenyl radical originating from the styrene.
20. (Original) The method according to claim 14, wherein
the monomer is vinyl triethylsilane, vinyl tris silane, and/or vinyl-t-butyl dimethylsilane.